

SUSTAINABILITY
TOOLS FOR
ASSESSING &
RATING COMMUNITIES

briefing to King County GIS Users Group

August 7, 2013

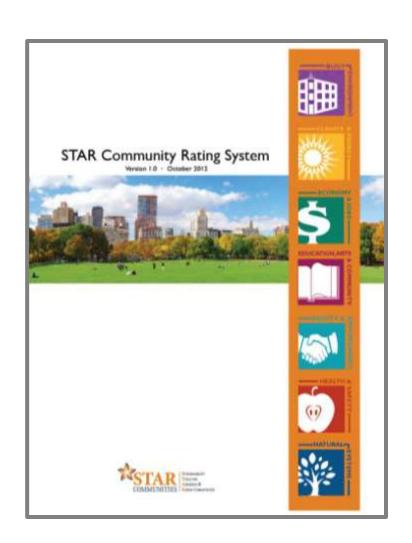
Richard Gelb



www.STARcommunities.org STAR Community Rating System

The STAR Community Rating
System is a self-reporting system
for measuring progress on
sustainable community
conditions.

Released October 2012, the Rating System is the first framework for evaluating the sustainability of North American communities.



Built by and for Local Governments

- In 2008, ICLEI-Local Governments for Sustainability, the U.S.
 Green Building Council, National League of Cities, and the
 Center for American Progress announced formal partnership
- Established a diverse, consensus-based stakeholder engagement process
- More than 200 volunteers representing cities and counties, state and federal agencies, non-profit organizations, national associations, universities, utilities, and private corporations
- King County was a 'Beta' and is now a 'Pilot' Community







30+ STAR Community Pilots

UNDER 100,000

- El Cerrito, CA
- Northampton, MA
- Santa Fe, NM
- Evanston, IL
- Victoria, Canada
- Santa Monica, CA
- Rockingham County, NC
- Albany, NY
- Woodbridge, NJ
- Davenport, IA

100,001 - 499,999

- Fort Collins, CO
- Chattanooga, TN
- Des Moines, IA
- Tacoma, WA
- Chandler, AZ
- Riverside, CA
- St. Louis, MO
- Lee County, FL
- Cleveland, OH
- Atlanta, GA

500,000 - 999,999

- Seattle, WA
- Portland, OR
- Vancouver, BC
- Washington, DC
- Austin, TX
- DeKalb County, GA
- Indianapolis, IN

1,000,000 +

- Calgary, AB
- Montreal, QC
- Broward County, FL
- King County, WA
- Toronto, ON

Elements of STAR Communities

A framework for measuring the social, economic and environmental dimensions of community sustainability (including outcomes and actions being taken)

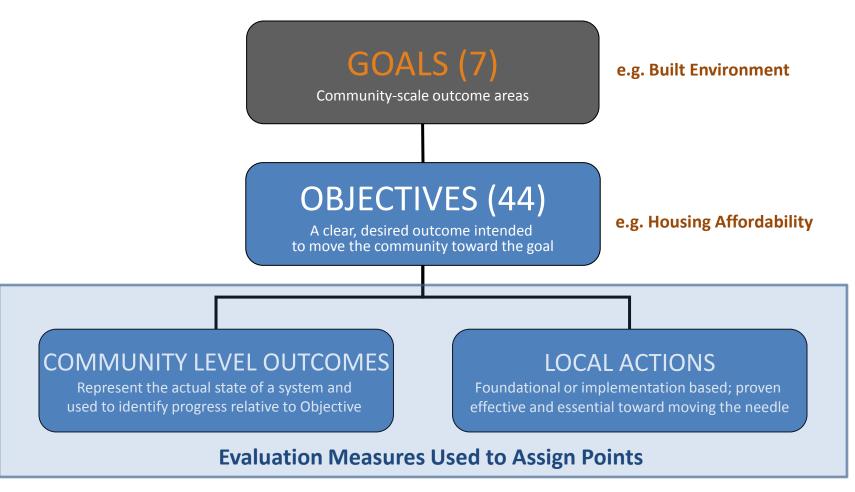
A rating system that drives continuous improvement and fosters competition

An online tool that gathers, organizes, analyzes, and presents information on community performance



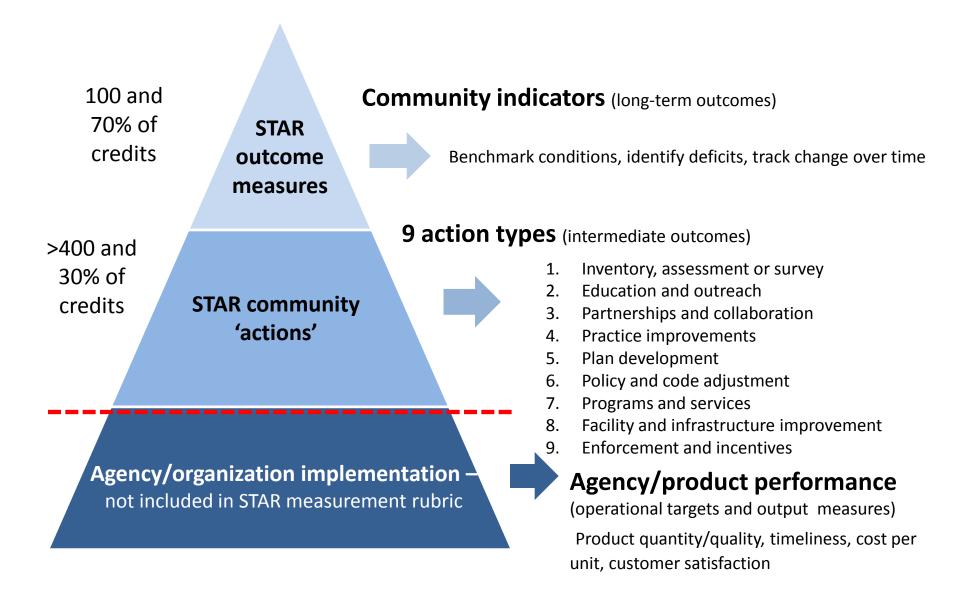
Built Environment	Climate & Energy	Education, Arts & Community	Economy & Jobs	Equity & Empowerment	Health & Safety	Natural Systems
Ambient Noise & Light	Climate Adaptation	Arts & Culture	Business Retention & Development	Civic Engagement	Active Living	Green Infrastructure
Community Water Systems	Greenhouse Gas Mitigation	Community Cohesion	Green Market Development	Civil & Human Rights	Community Health & Health System	Invasive Species
Compact & Complete Communities	Greening the Energy Supply	Educational Opportunity & Attainment	Local Economy	Environmental Justice	Emergency Prevention & Response	Natural Resource Protection
Housing Affordability	Industrial Sector Resource Efficiency	Historic Preservation	Quality Jobs & Living Wages	Equitable Services & Access	Food Access & Nutrition	Outdoor Air Quality
Infill & Redevelopment	Resource Efficient Buildings	Social & Cultural Diversity	Targeted Industry Development	Human Services	Indoor Air Quality	Water in the Environment
Public Spaces	Resource Efficient Public Infrastructure		Workforce Readiness	Poverty Prevention & Alleviation	Natural & Human Hazards	Working Lands
Transportation Choices	Waste Minimization				Safe Communities	

Rating System Framework



e.g. Demonstrate that 10% of residential units built or substantially rehabilitated in the past 3 years in urban centers are dedicated as subsidized affordable housing e.g. Require, incentivize, or subsidize creation of affordable housing in transit-served areas and areas identified for compact, mixed-use development

Measurement hierarchy in STAR – how credits are awarded in the system:



9 action types

Foundational Actions:

- Partnerships and collaboration
- Inventory, assessment or survey
- Education and outreach
- Plan development
- Policy and code adjustment
- Practice improvements

Implementation-based Actions:

- Programs and services
- Facility and infrastructure improvement
- Enforcement and incentives

STAR Communities alignment with King County Strategic Plan

=	KCSP	scope
) –	NC3F	scope

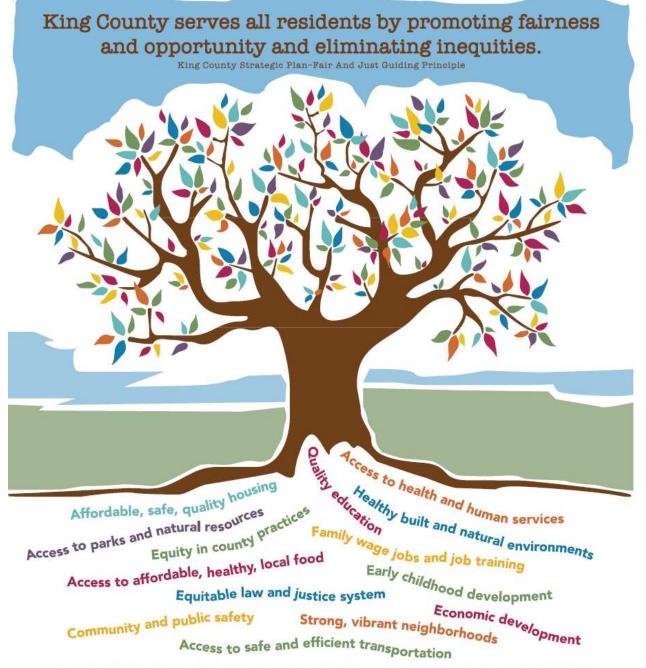
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	Built Environment	Climate & Energy	Education, Arts & Community	Economy & Jobs	Equity & Empowerment	Health & Safety	Natural Systems
	Ambient Noise & Light	Climate Adaptation	Arts, Culture and Heritage	Business Retention & Support	Civil & Human Rights	Active Living	Green Infrastructure
	Compact & Complete Communities	Resource Efficient Infrastructure	Community	Community- Based Economic Development	Community Empowerment	Emergency Prevention & Response	Invasive Species
	Housing Affordability	Greenhouse Gas Mitigation	Educational Opportunities and Attainment	Local Economy	Environmental Justice	Food Access & Nutrition	Land Conservation
(Infill & Redevelopment	Greening the Energy Supply	Social & Cultural Diversity	Market Demand	Equitable Services & Access	Community Health & Health System	Natural Resources Protection
(Public Spaces	Industrial Sector Resource Efficiency	Historic Preservation	Quality Jobs & Living Wages	Human Services	Indoor Air Quality	Outdoor Air Quality
	Transportation Choices	Resource Efficient Buildings	Workforce Readiness	Targeted Industry Sectors Development	Prevention & Alleviation	Natural & Human Hazards	Water in the Environment
	Community Water Systems	Waste Minimization				Safe Communities	Working Lands

Equity dimensions of STAR

Process Equity: Inclusive, open, and fair access by all stakeholders to decision processes that impact sustainable community outcomes.

Distributional Equity: Fair and just distribution of benefits and burdens to all residents across the community landscape, with little imbalance based on geography, gender, race/ethnicity, or income levels of households.

Intergenerational Equity: Effects of today's actions on the fair distribution of benefits and burdens to future generations and communities.



DETERMINANTS OF EQUITY

King County Equity and Social Justice (ESJ) policy summary



so that

so that

Agencies get and use

- Analytical tools to identifying equity and its impacts
- Collaboration across branches/ agencies
- 3. Agency work plans
- Accounting for achievements

Agencies and branches realize ESJ foundational practices in

- 1. Siting and delivery of services
- 2. Policy development and decision making
- 3. Education and communication within county government
- 4. Community engagement and partnerships

Determinants become more equitable

- Community economic development
- 2. Community and public safety
- 3. Law and justice system
- 4. Early childhood development
- 5. Education
- 6. Equity in county practices
- 7. Food systems
- 8. Health and human services
- Healthy built and natural environments
- 10. Housing
- 11. Job training and jobs
- 12. Neighborhoods/social networks
- 13. Parks and natural resources
- 14. Transportation

Improved levels of equity and social justice in all communities



Built Environment	Climate & Energy	Education, Arts & Community	Economy & Jobs	Equity & Empowerment	Health & Safety	Natural Systems
Ambient Noise & Light	Climate Adaptation	Arts & Culture	Business Retention & Development	Civic Engagement	Active Living	Green Infrastructure
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Transportation Choices	Waste Minimization				Safe Communities	

Distributional Equity ... per Equitable Services and Access objective:

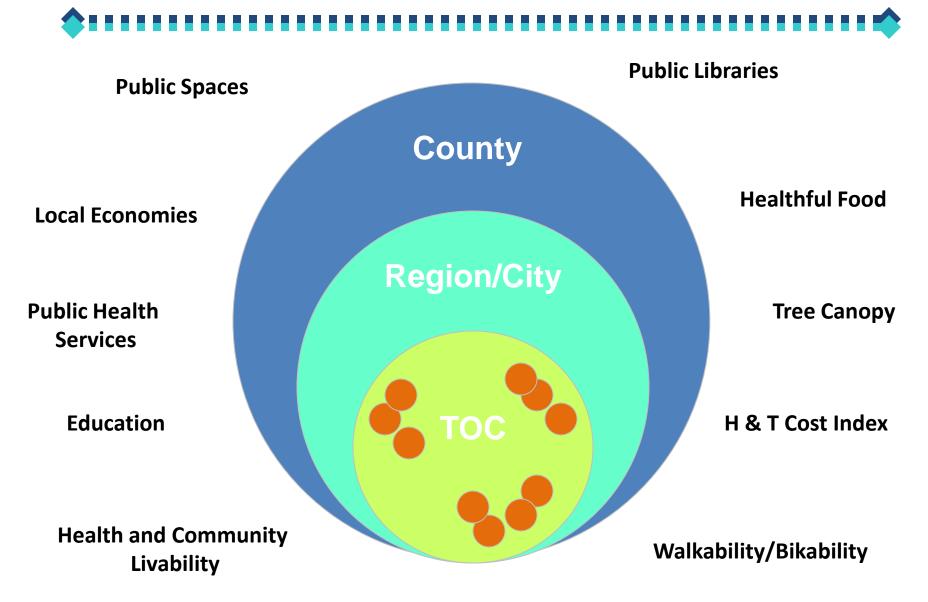
- Public transit facilities and service levels
- Public libraries
- Public schools
- Public spaces
- Healthful food
- Health and human services
- Digital access
- Urban tree canopy
- Emergency response times

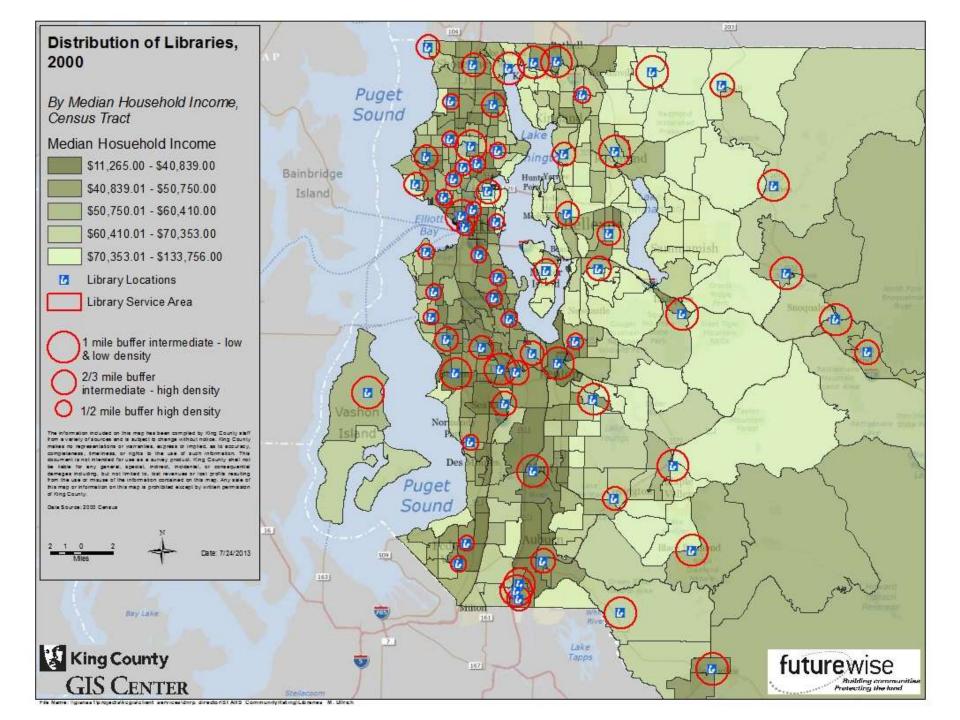
"Show the amount that
the lowest performing
quintile (or quintiles of
concern) have moved toward
the community norm
between the
measurement periods."

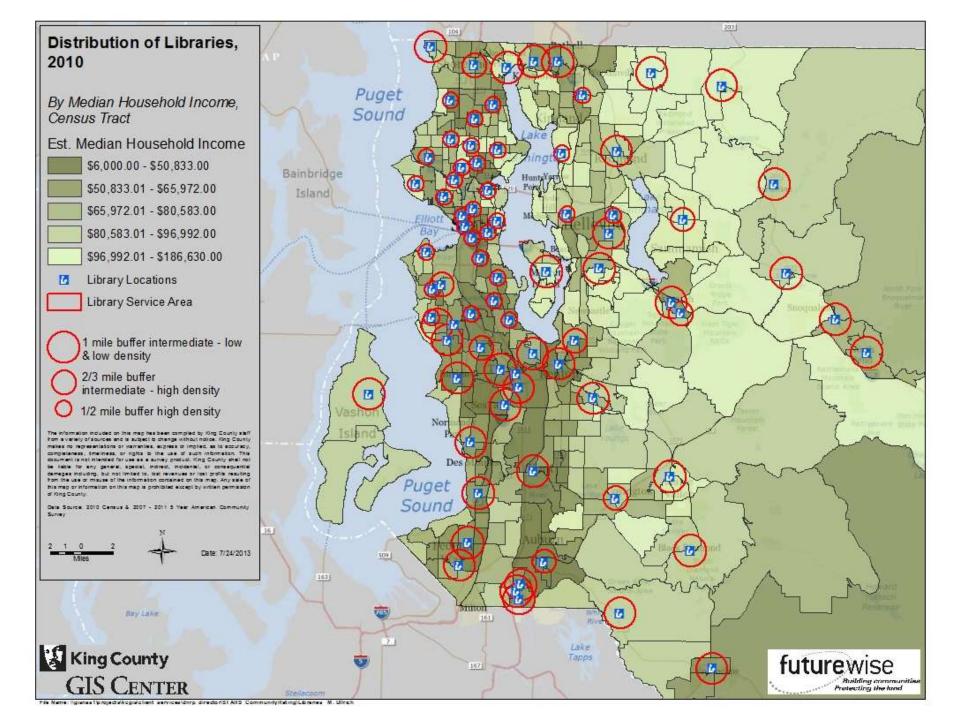
Equity (k)NOW – Futurewise Partnership

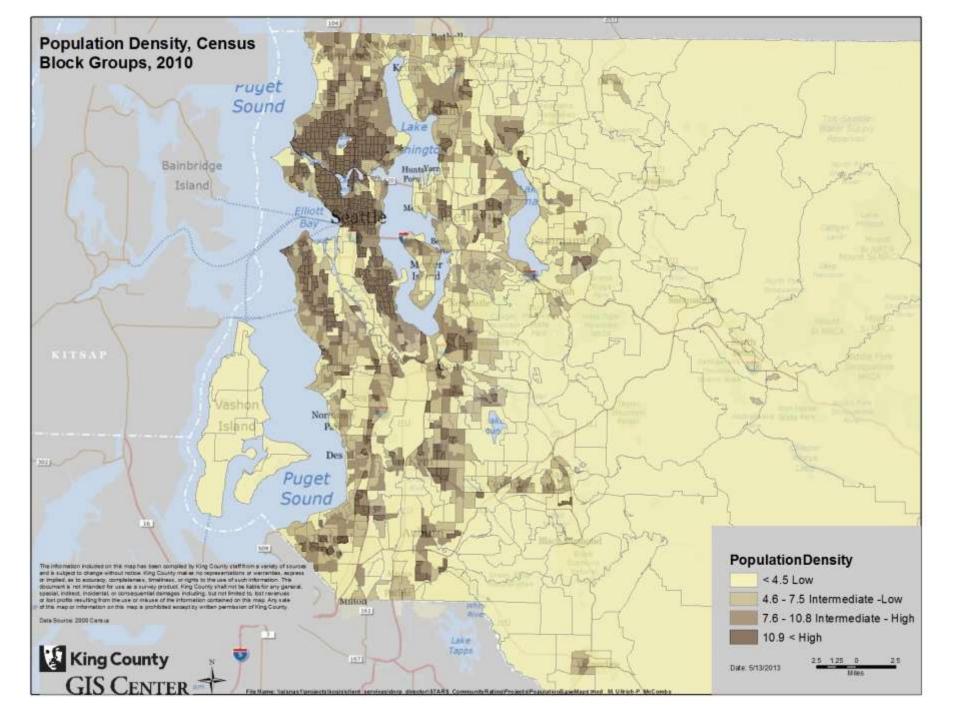
- Step 1: Baseline Assessment
- Step 2: Community Prioritization
- Step 3: Community Equity Report
- Step 4: Develop and Implement Actions
- Step 5: Measure Outcomes

Step 1: Baseline Assessment



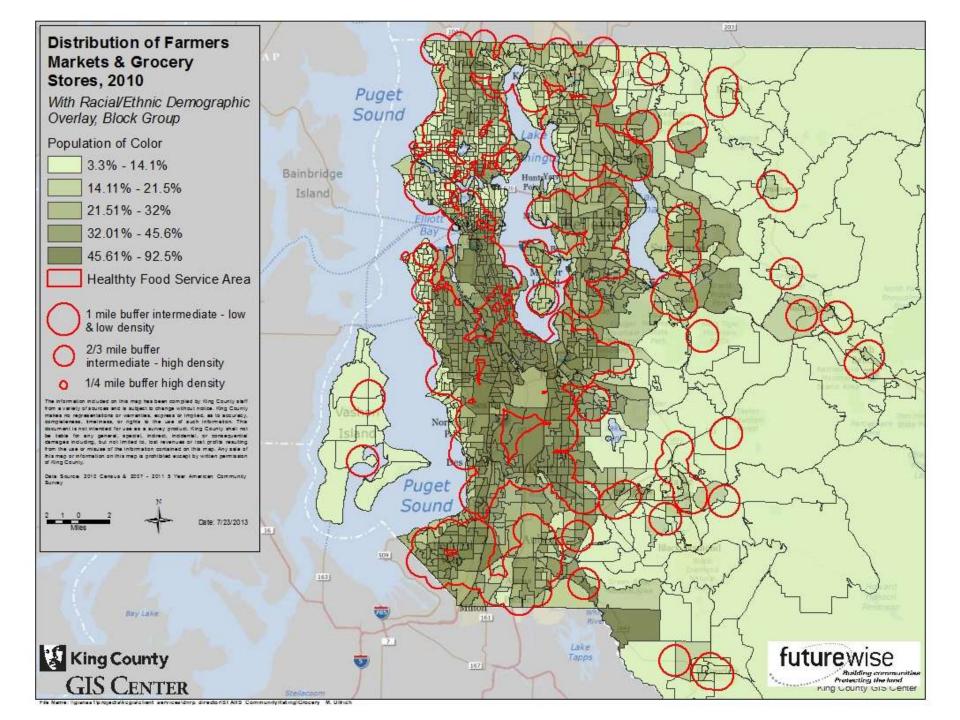


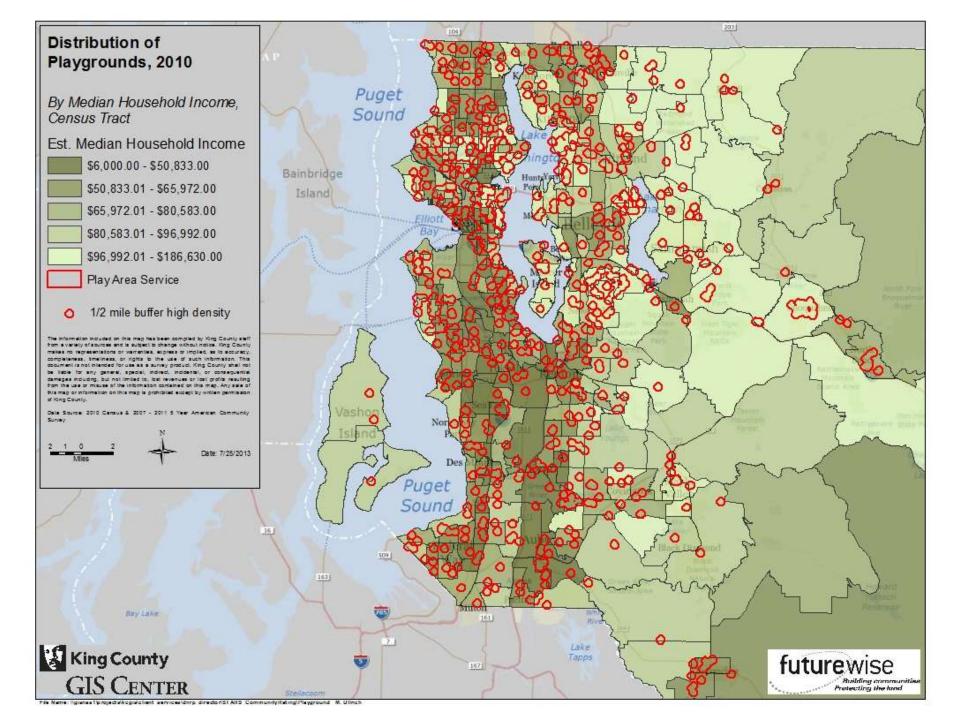




Library access in quintiles by % People of Color - 2000 to 2010

Library Service Areas People of Color 2010				Library Service Areas People of Color 2000					
# Block Groups	Quintile	Performance	# Block Groups	Quintile	Performance				
161	1: 3% - 14%	56%	141	1: 1% - 10%	44%				
163	2: 14% - 21%	57%	175	2: 10% - 16%	55%				
140	3: 21% - 32%	<mark>49%</mark>	169	3: 16% - 24%	53%				
157	4: 32% - 45%	55%	152	4: 24% - 37%	48%				
201	5: 45% - 92%	71%	169	5: 37% - 100%	53%				
Com	munity Norm	58%	Comi	munity Norm	51%				



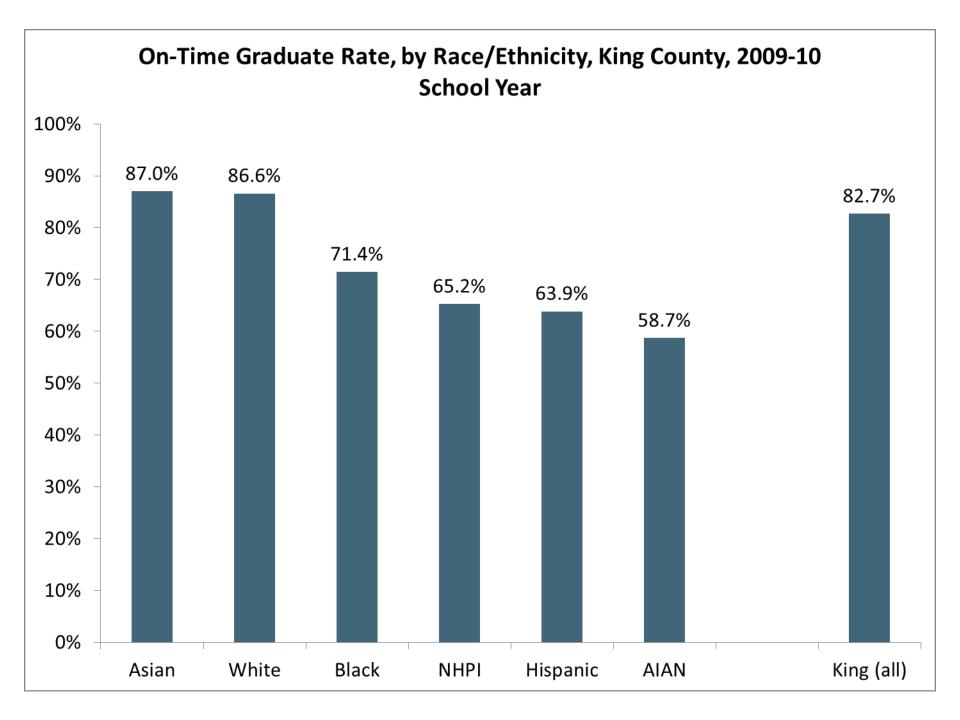


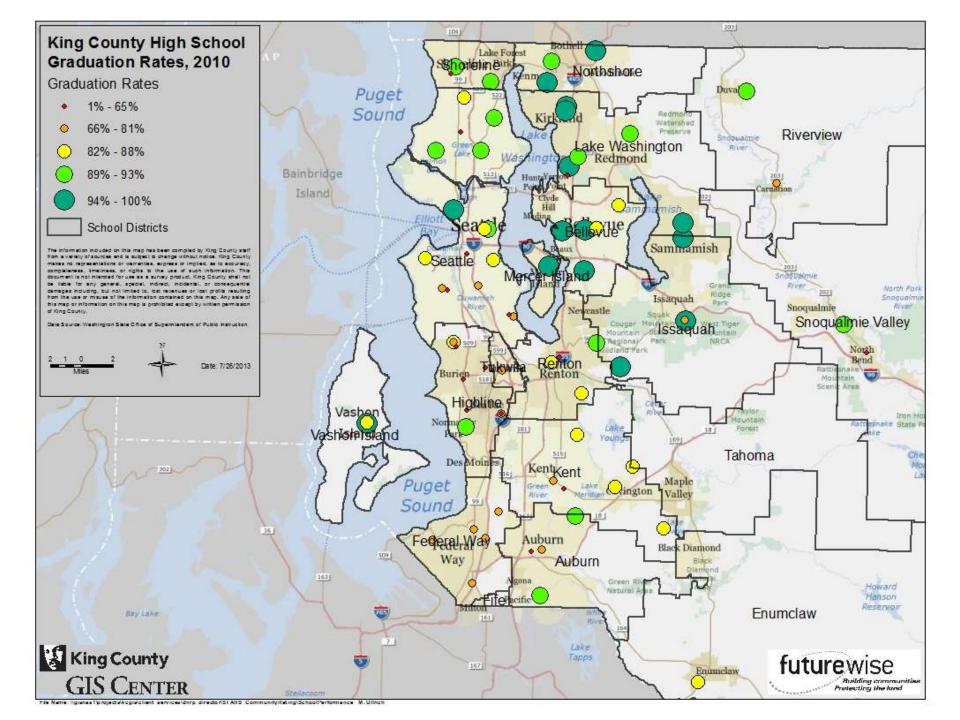
Access to playgrounds in quintiles by race and HH income 2010

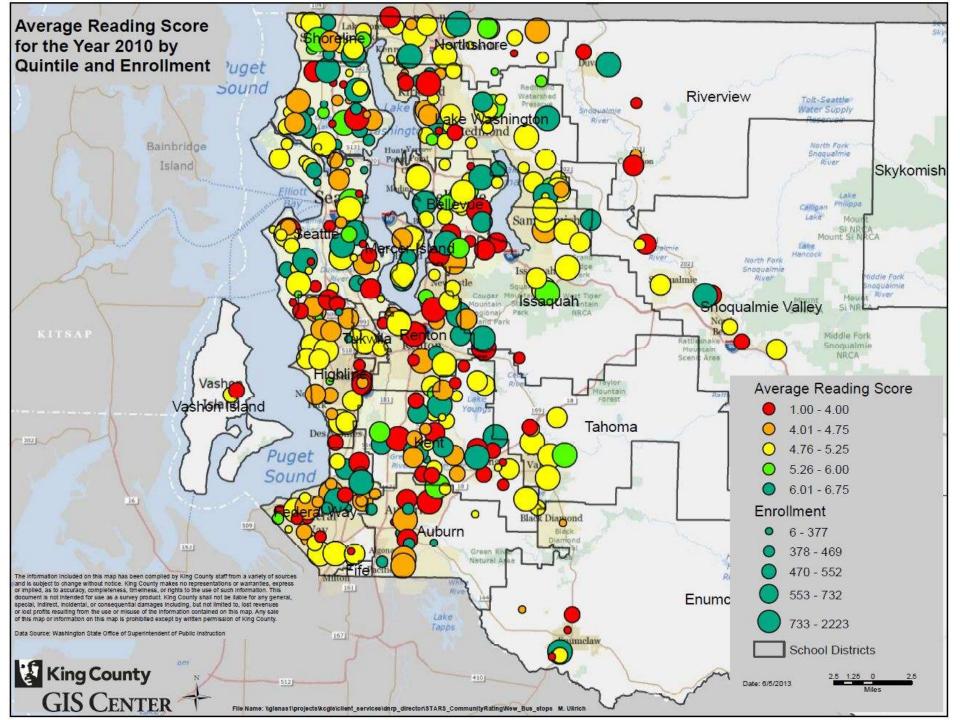
by Median Household Income 2010

by People of Color 2010

Numbe of Tracts Served		Perce	erage ntange of s Served	Number of Block Groups			age Percentange Block Groups Served
80	1: \$6,000.00 - \$50,833.00	2831	35.39	285	1: 3.3% - 14.1%	7886	27.67
80	2: \$50,833.01 - \$65,972.00	2688	33.60	287	2: 14.11% - 21.5%	10275	35.80
79	3: \$65,972.01 - \$80,583.00 4:	2452	31.04	283	3: 21.51% - 32%	9223	32.59
79	\$80,583.01- \$96,992.00	2045	25.88	285	4: 32.01% - 45.6%	8515	29.88
79	5: \$96,992.01 - \$186,630.00	1933	24.46	280	5: 45.61% - 92.5%	9848	35.17
	Community No	orm	30.07		Commu	nity Norm	32.22





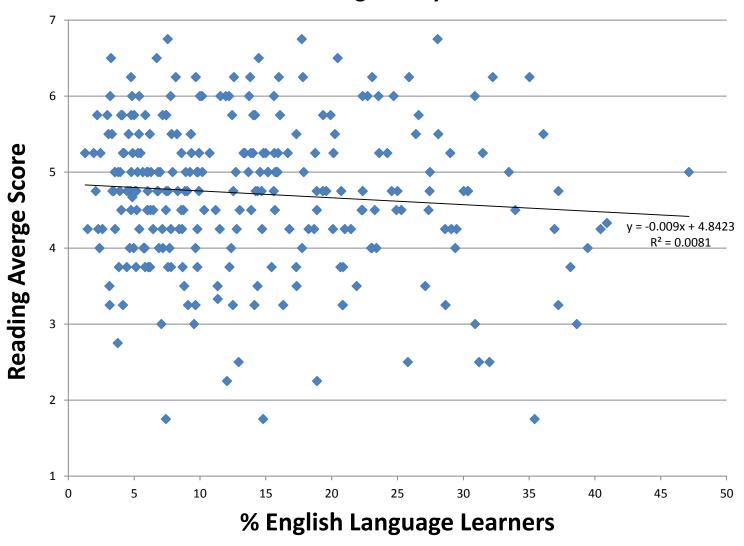


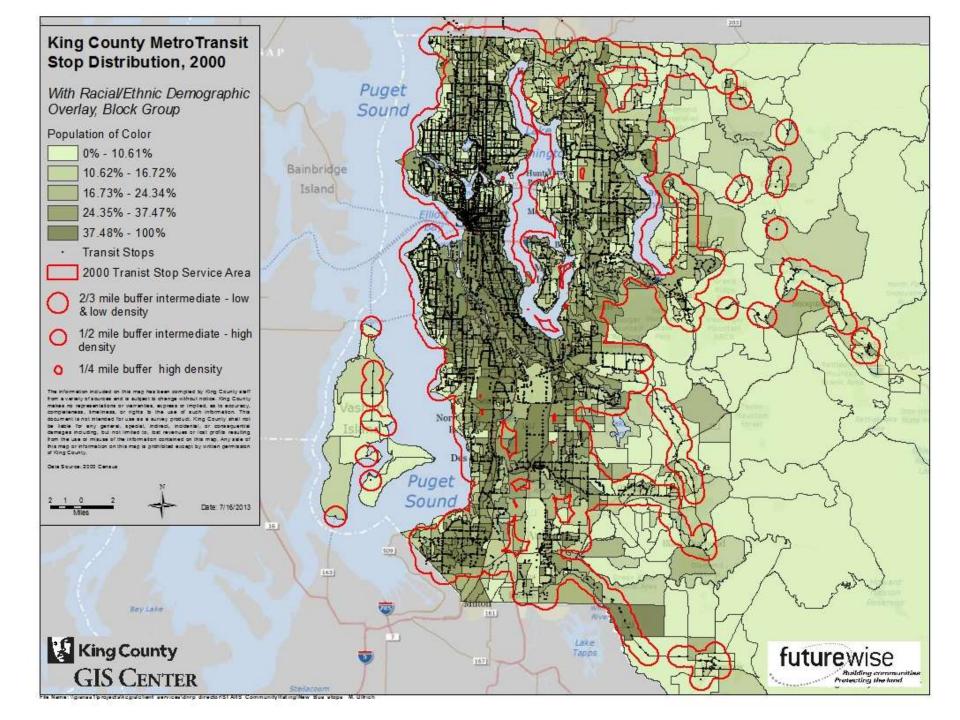
Reading scores as related to % low income and % English Language Learners (ELL)

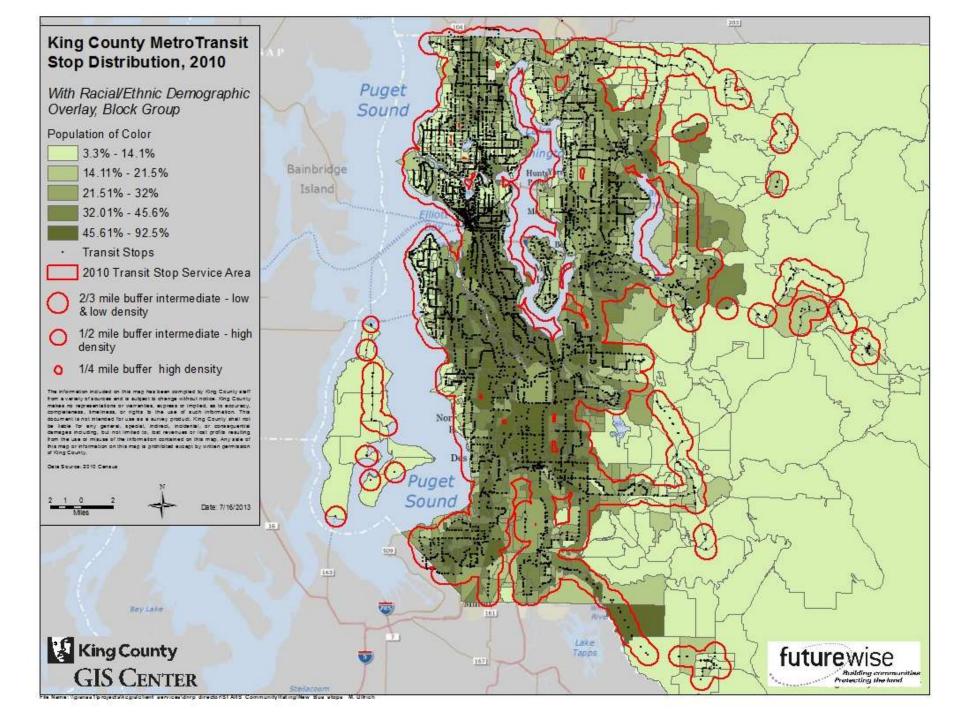
Low Income Quintile	# of Schools	Min %	Max %	Median Reading Score
1	83	-	14.57	4.994
2	79	14.60	28.24	4.785
3	78	28.48	48.48	4.779
4	78	48.63	70.03	4.685
5	79	70.07	96.10	4.559
ELL Quintile	# of Schools	Min %	Max %	Median Reading Score
ELL Carrence	# 01 3010013	141111 /0	IVIUX 70	Wicdian Redaing Score
1	73	-	4.15	4.946
				_
1	73	-	4.15	4.946
1 2	73 62	4.23	4.15 7.43	4.946 4.712

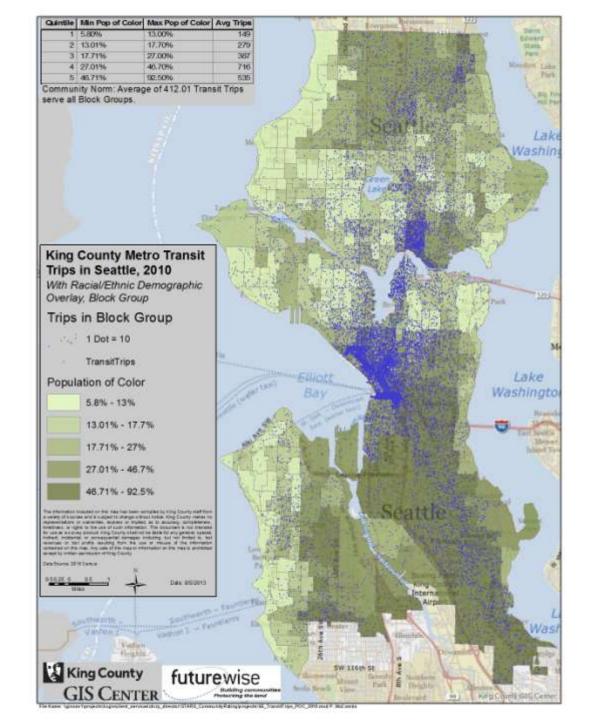
Community Norm: 4.774

2010 – All King County Schools



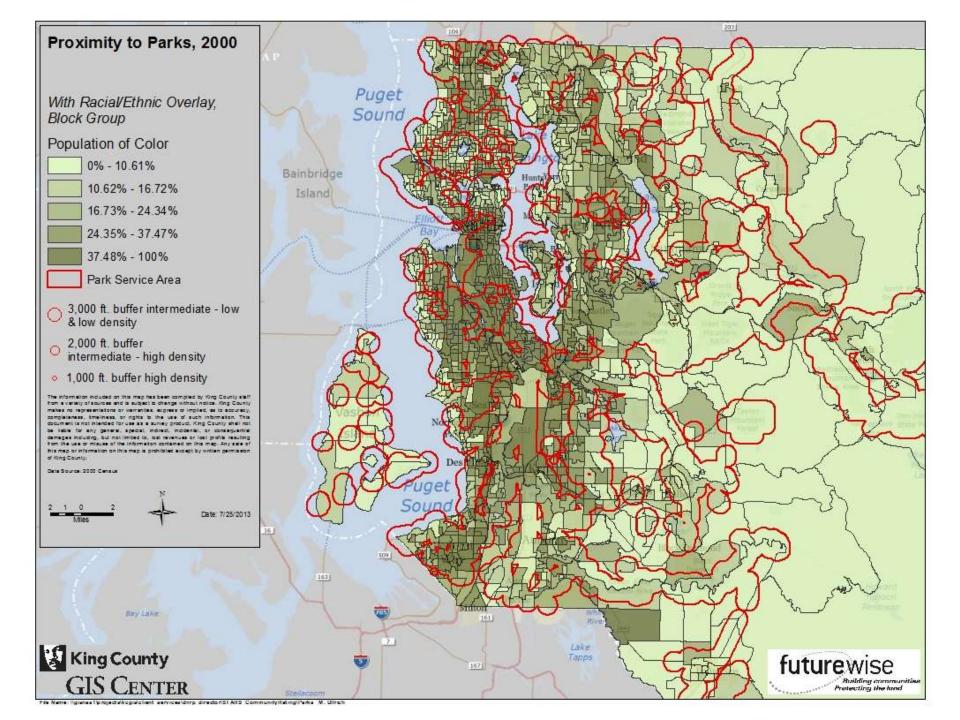


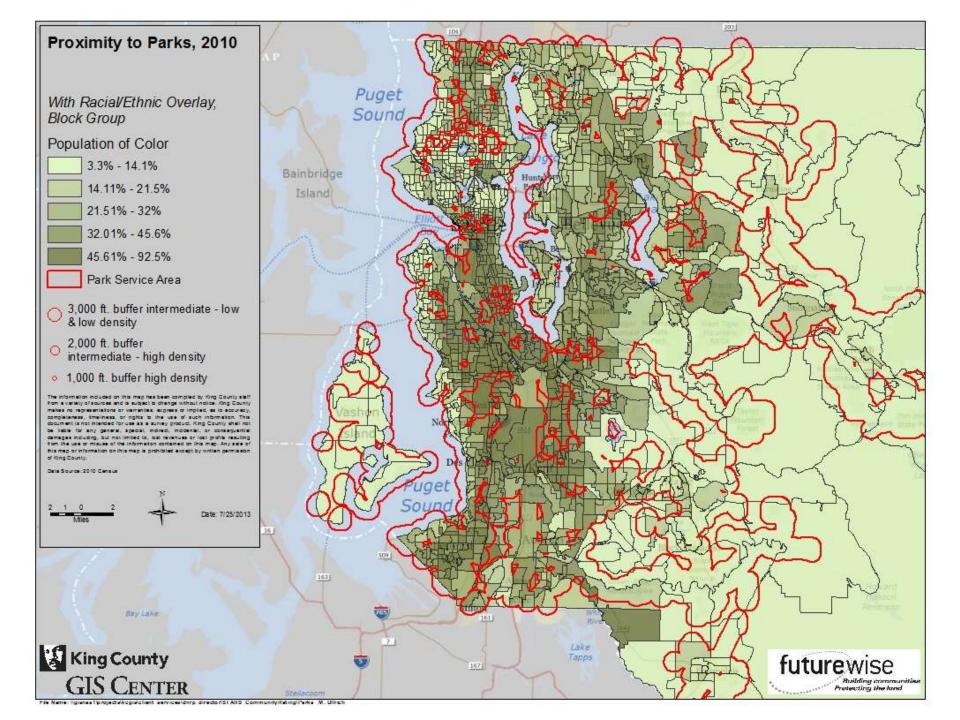


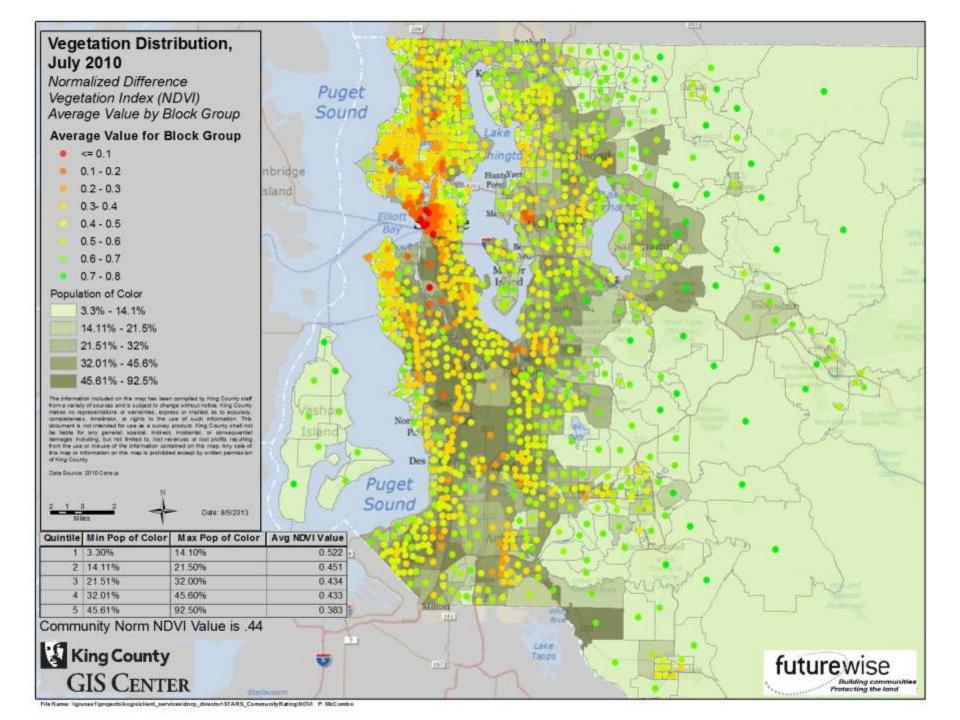


Transit Trips People of Color 2010

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Number of Block Groups	Quintile	Total Trips In Quintile	Average trips per day
285	1: 3.3% - 14.1%	27294	95.77
287	2: 14.11% - 21.5%	55779	194.35
283	3: 21.51% - 32%	74901	264.67
285	4: 32.01% - 45.6%	70984	249.07
280	5: 45.61% - 92.5%	90977	324.92
	Transit Tri	Community Norm ps People of Color 2000	225.75
Number of Block Groups Served	Quintile	Total Trips In Quintile	Average trips per day
317	1: 0% - 10.61%	25787	81.35
316	2: 10.62% - 16.72%	38188	120.85
316	3: 16.73% - 24.34%	53012	167.76
316	4: 24.35% - 37.47%	58208	184.20
315	5: 37.48% - 100%	77273	245.31
		Community Norm	159.89



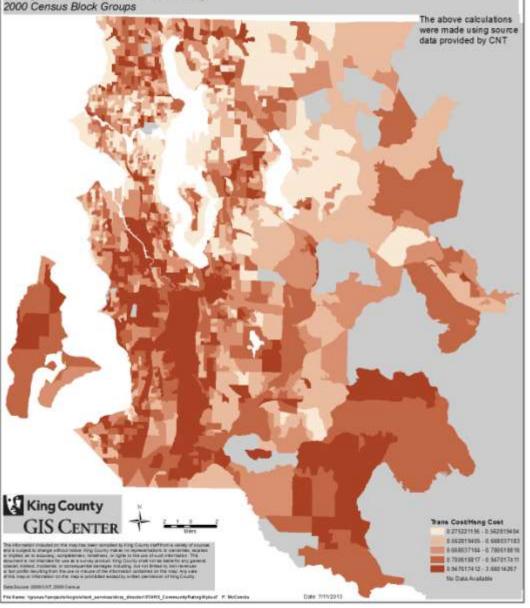


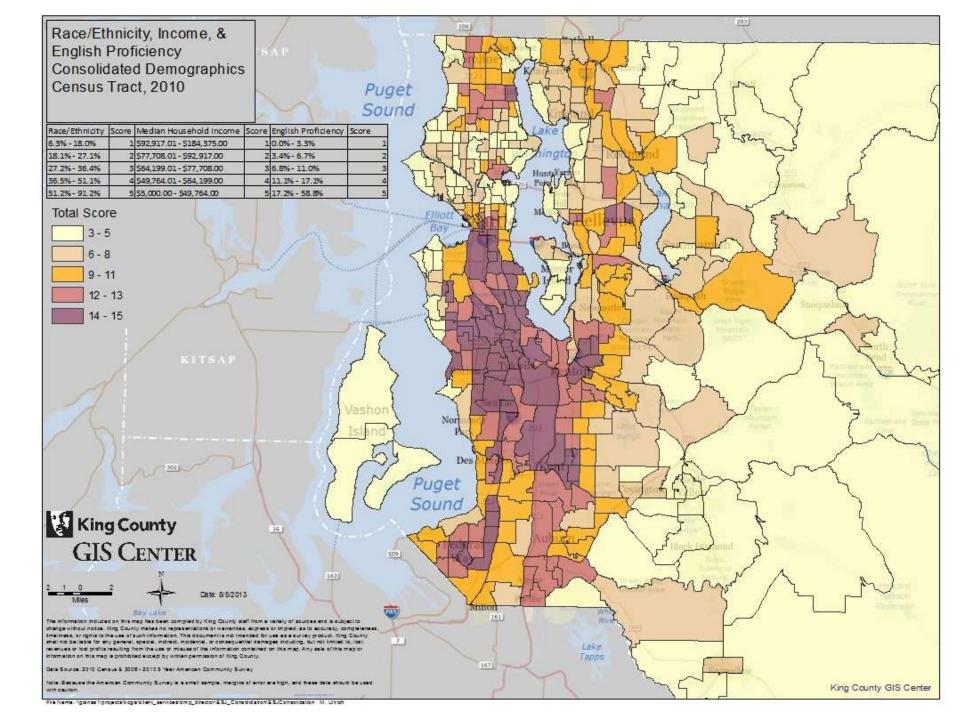


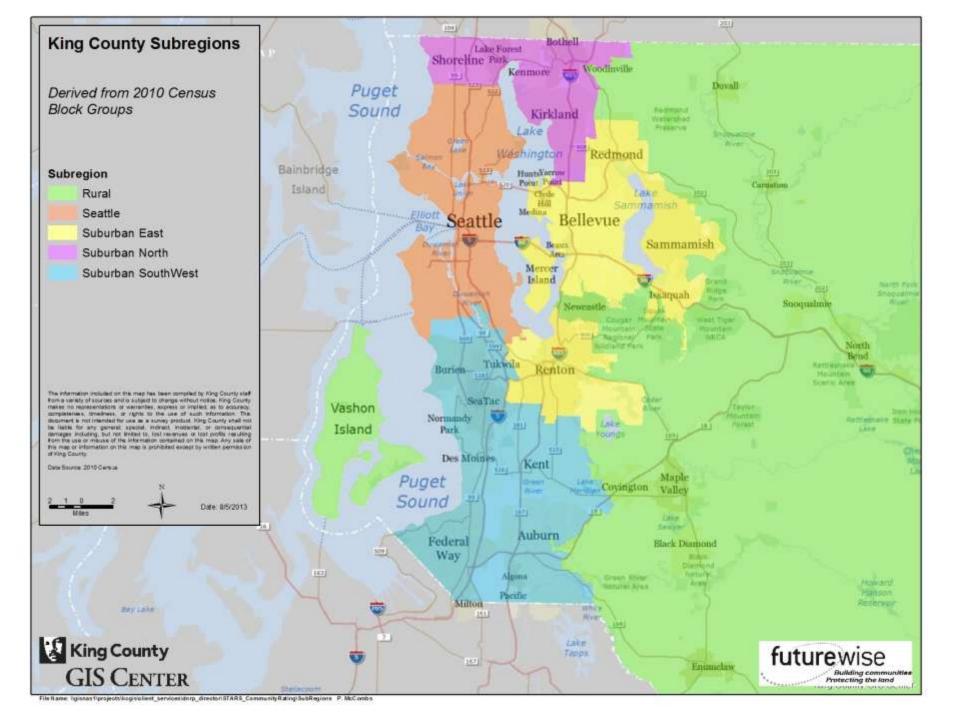
2009 H + T Index : Transportation and Housing Costs

Ratio of monthly transportation costs to housing Costs, as modeled for the AMI, area average household size, and area average commuters per household. Using 2000 Census Block Groups

Quintile	People of Color	Avg Trans Cost	Avg Haing Cost	Ratio
1	0% - 10.61%	1109	1872	0.099
2	10.62% - 16.72%	1134	1787	0.685
3	16.73% - 24.34%	1100	1591	0.747
4	24.35% - 37.47%	1090	1484	0.798
5	37.40% - 100%	1056	1236	0.955







Priority STAR objectives w/ spatial dimension

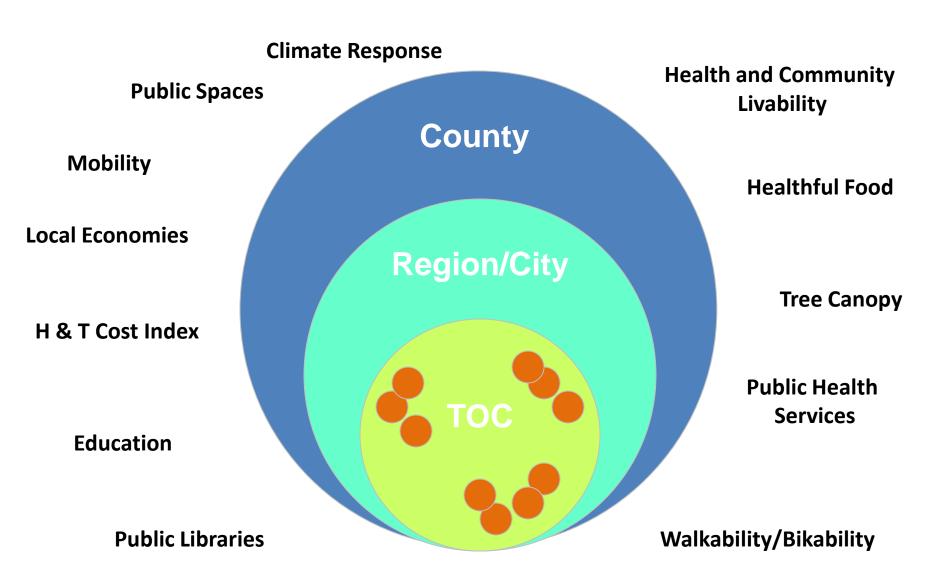
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- Compact Complete Communities density, destinations, transit, walkability, design, housing
- Affordable Housing provision and distribution
- Public Spaces acreage, proximity, connectivity, use
- **Transportation Choices** mode split, affordability, safety, VMT
- Civic Engagement voting rates and volunteerism
- Equitable Service & Access
- Food Access & Nutrition local food, access to healthy food
- Green Infrastructure designated and distribution

Action inventory and outcomes tracking in nested geographies for context-sensitive decision support



Equitable Services and Access Actions



Adopt an equity plan that evaluates current conditions in the community and establishes targets to improve equitable access and proximity in at least the categories identified in the outcome measure

Plan Development

Adopt an equity or social justice policy that establishes a clear commitment to equity in local government decision-making, activities, and investments

Policy and Code Adjustment

Promote events and programs that recognize and celebrate social and cultural diversity in the community

Education and Outreach

Publicize efforts to improve equitable access and proximity to community facilities, services, and infrastructure

Education and Outreach

Establish partnerships that engage key community groups and stakeholders in activities to advance equitable access and proximity to facilities, services, and infrastructure

Partnerships and Collaboration

6 Provide equity and diversity training for local government staff

Practice Improvements

Modify the deployment of local programs and services to reduce disparities within the categories identified in the outcome measure

Programs and Services

Construct new facilities and infrastructure in locations that reduce existing disparities within the categories identified in the outcome measure

Facilities and Infrastructure

Step 4: Implement Actions

Green Infrastructure





- 1. Create a community-wide green infrastructure plan
- 2. **Adopt codes** that require proactive green infrastructure practices for new developments
- 3. Adopt a policy requiring that project sites are evaluated for green infrastructure potential
- 4. **Partner with key community groups** and other stakeholders to ensure that green infrastructure practices are used in appropriate settings
- 5. **Create incentive programs** to encourage land owners to adopt green infrastructure practices
- 6. **Establish a green infrastructure monitoring program** and regularly report on status of desired outcomes
- 7. **Increase** the percentage of **funding** invested in green infrastructure
- 8. **Upgrade public spaces** and public buildings based upon locally-adopted or recognized best practices in green infrastructure.
- 9. Provide for ongoing maintenance of green infrastructure at level required

Related Opportunities

- King County's Equity Impact Assessment Tool to understand benefits and burdens distribution pattern of proposed actions, how alternatives will either make -/+ unfairness/ unevenness, what factors can minimize unfairness or be pro-equity.
- Regional Coordination making our work visible as a precursor step to aligning contributions of multiple actors.
- National Benchmarking to assist with diagnostics, measurement, and priority setting.
- Toward a 'Science of Governance' that helps build the evidence about 'what works' toward outcome improvements.

Building Evidence About 'Action Effectiveness' - degree of impact on community conditions

Community conditions	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Actions:														
Partnership & Collaboration		\												
Inventory, Assessment or Survey						ge ov aphy			ion					
Plan Development			,	• D	emo	grapl	ny of	area						
Policy & Code Adjustment							1	Coe	fficie	nt of v	ariatio	n, R va	lue	
Education & Outreach														
Practice Improvements									ence actio					
Enforcement & Incentives						touc nt of		-	tion					
Programs & Services														
Facility & Infrastructure improvement														

How GIS staff can contribute:

- Identify- explore critique the (spatial) STAR 'actions' and 'outcomes' that relate to your program area
- Advance standard ways of denoting spatial and temporal characteristics of actions and outcomes
- Determine where actions and outcomes are aligned in program theory, and
- Advance the 'Science of Governance' by developing evidence about 'what works' toward outcome improvements

Thank you!

- Questions?
- Discussion?
- Where to get more information:
 - King County STAR Communities
 SharePoint site
 - www.STARcommunities.org
 - richard.gelb@kingcounty.gov